* SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name/designation Zylinder-Spray

* 1.2 Relevant identified uses of the substance or mixture and uses advised against

* **Use of the substance/mixture**
Protects against corrosion, is water resistant, creepy

Remark
UFI: FUMC-N1FW-K00P-3Y8J

1.3 Details of the supplier of the safety data sheet

Supplier
F.W.Klever
Hauptstraße 20
D-84168 Aham
Telephone +49 (0) 8744 96 99 10
Telefax + 49 (0) 8744 96 99 96
E-mail info@ballistol.de
Website www.ballistol.de

Department responsible for information:
Qualitätssicherung
Telephone +49 (0) 8744 96 99 80

E-mail (competent person):
info@ballistol.de

Manufacturer
F.W.Klever
Hauptstraße 20
D-84168 Aham
Telephone +49 (0) 8744 96 99 10
Telefax + 49 (0) 8744 96 99 96
E-mail info@ballistol.de
Website www.ballistol.de

Department responsible for information:
Qualitätssicherung
Telephone +49 (0) 8744 96 99 80

E-mail (competent person):
info@ballistol.de

1.4 Emergency telephone number

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Aerosol 1, H222	

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Aerosol 1, H229	

Hazard statements for physical hazards
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms

GHS02

Signal word
Danger

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

Precautionary statements
P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container to recycling

2.3 Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
106-97-8	203-448-7	601-004-00-0	butane	20 weight-%	Flam. Gas 1; H220 Press. Gas	
64742-47-8			Hydrocarbons C11-C14	< 10 weight-%	Asp. Tox. 1; H304 Aquatic Chronic 3; H412	
74-98-6	200-827-9	601-003-00-5	propane	7 weight-%	Flam. Gas 1; H220 Press. Gas	

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation
Provide fresh air.
In the event of symptoms refer for medical treatment.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap.

After eye contact
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion
If swallowed, immediately drink:
Water
Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Foam
ABC-powder
Carbon dioxide (CO2)
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In the event of fire the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Use water spray jet to protect personnel and to cool endangered containers.
Heating causes rise in pressure with risk of bursting
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For containment

Take up residues with absorbent material (e.g. sawdust).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4 Reference to other sections

No data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Do not spray on naked flames or any incandescent material.
Keep away from sources of ignition - No smoking.
Protect aerosols from temperatures exceeding 50°C/ 122°F
Do not inhale gases/vapours/aerosols.

Advices on general occupational hygiene

Remove contaminated, saturated clothing immediately.
Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container.

Further information on storage conditions

Recommended storage temperature: room temperature.
Storage time: 3 years.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No	EC No	Substance name	occupational exposure limit value
106-97-8	203-448-7	n-Butane	600 [ml/m³(ppm)] 1450 [mg/m³] Short-term(ml/m³) 750 Short-term(mg/m³) 1810 (UK)
106-97-8	203-448-7	n-Butane	Short-term(ml/m³) 1000 (1) (1) 15 minutes average value (IE)

8.2 Exposure controls

Personal protection equipment

Eye/face protection
With demand: protective glasses

Hand protection
Gloves (oil-resistant)
Recommendation: protective glove (referred to EN374).

Respiratory protection
Respiratory protection must be worn whenever the WEL levels have been exceeded
The following applies to propane in general: If the concentration is exceeded, closed-circuit breathing apparatures must be used
Use filter apparatus type AX, identification colour brown according to EN 371

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
Aerosol

Colour
light yellow

Odour
characteristic

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
Melting point/freezing point	not determined		
Boiling point or initial boiling point and boiling range	-48 °C		(Propan)
flammability	not determined		
Lower and upper explosion limit	Upper explosion limit 10.9 Vol-%		(Propan)
Lower and upper explosion limit	Lower explosion limit approx. 1.5 Vol-%		(Propan)

	Value	Method	Source, Remark
Flash point	approx. -104 °C		(Propan)
Auto-ignition temperature	not determined		
Decomposition temperature	not determined		
pH	not determined		
Viscosity	kinematic approx. 28 (20°C)		information concerns to liquid phase
Solubility(ies)	Water solubility		Immiscible
Partition coefficient n-octanol/water (log value)	not determined		
Vapour pressure	not determined		
Density and/or relative density	approx. 0.9 g/cm³ (20°C) pressure 1013 mbar		information concerns to liquid phase
Relative vapour density	not determined		
particle characteristics	not determined		

9.2 Other information

Other safety characteristics

	Value	Method	Source, Remark
refraction index	1.48 (20°C)		

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Container under pressure. Protect from direct exposure to sunlight and temperatures exceeding 50°C/122°F.

10.5 Incompatible materials

Oxidising agent, strong

10.6 Hazardous decomposition products

Carbon monoxide
Carbon dioxide

Additional information

Product is stable under normal storage conditions

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	> 5000 mg/kg Species Rat		
Acute dermal toxicity	> 5000 mg/kg Species Rabbit		
Acute inhalation toxicity	not determined		

Skin corrosion/irritation

not determined

Serious eye damage/irritation

Animal data

Result / Evaluation	Method	Source, Remark
slightly irritant		

Sensitisation to the respiratory tract

not determined

Skin sensitisation

Animal data

Result / Evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.			

Germ cell mutagenicity

not determined

Carcinogenicity

not determined

Reproductive toxicity

not determined

STOT-single exposure

not determined

STOT-repeated exposure

not determined

Aspiration hazard

not determined

11.2 Information on other hazards

No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	not determined		
Chronic (long-term) fish toxicity	not determined		

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) toxicity to crustacea	not determined		
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	not determined		
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation			Moderately/partially biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product	Waste name
130205 *	mineral-based non-chlorinated engine, gear and lubricating oils

Appropriate disposal / Package

Non-contaminated packages may be recycled.
Recycle sales packaging via DSD (Duales System Deutschland).

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	UN 1950	UN 1950	UN 1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3 Transport hazard class(es)	2.1	2.1	2.1

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

Land transport (ADR/RID)

UN number or ID number	UN 1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	2.1
Hazard label(s)	2.1
Classification code	5F
Packing group	-
Environmental hazards	No
Limited quantity (LQ)	1 L
Special provisions	190, 327, 344, 625
Tunnel restriction code	D

Sea transport (IMDG)

UN number or ID number	UN 1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	2.1
Packing group	-
Environmental hazards	No
Limited quantity (LQ)	1 L
Marine pollutant	No
EmS	F-D, S-U

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number	UN 1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Packing group	-
Environmental hazards	No

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Additional information

National and local regulations concerning chemicals shall be observed.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Relevant H- and EUH-phrases (Number and full text)

H220	Extremely flammable gas.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Indication of changes

* Data changed compared with the previous version